

What We Claim Is:

1. A lawnmower deck comprising:
a deck sub-assembly having a first stiffness and including:
a top surface;
a skirt extending outwardly and downwardly from the top surface and encircling the
top surface, the skirt defining:
a cutting chamber underneath the top surface; and
a plurality of wheel mounts; and
a stiffener connected to at least one of the top surface and the skirt so that the stiffener and
the deck sub-assembly together have a combined stiffness that is at least approximately 20% greater
than the first stiffness.
2. The lawnmower deck according to claim 1, wherein the stiffener includes:
two side stiffener sections; and
two transverse stiffener sections being connected to the side stiffener sections.
3. The lawnmower deck according to claim 2, further including a cover extending over the
stiffener and connected to the deck sub-assembly.
4. The lawnmower deck according to claim 3, wherein the stiffener comprises an endless loop
on the top surface.
5. The lawnmower deck according to claim 4, wherein the plurality of wheel mounts include at
least a first pair of wheel mounts; and
the first stiffness and the combined stiffness are measured between the first pair of wheel
mounts.
6. The lawnmower deck according to claim 5, wherein the first stiffness is one of a bending
stiffness and a torsional stiffness and the combined stiffness is a corresponding one of a bending
stiffness and a torsional stiffness.

7. The lawnmower deck according to claim 6, wherein the first stiffness and the combined stiffness are each a bending stiffness;

the plurality of wheel mounts further include a third wheel mount;

5 the deck further includes a torsional stiffness measured between the third wheel mount and one wheel mount of the first pair of wheel mounts so that the stiffener and the deck together have a second combined stiffness measured between the third wheel mount and the one wheel mount, the second combined stiffness is at least 20% greater than the second stiffness.

8. The lawnmower deck according to claim 7, wherein the plurality of wheel mounts further includes a fourth wheel mount; and

the lawnmower deck further including a pair of handle mounts located above the third and fourth wheel mounts.

9. The lawnmower deck according to claim 8, wherein the stiffener extends between each of the wheel mounts.

10. The lawnmower deck according to claim 9, wherein the stiffener comprises a metallic hollow tube;

the deck comprises plastic; and

the stiffener is overmolded with the deck.

11. The lawnmower deck according to claim 10, wherein the combined stiffness is at least 30% greater than the first stiffness.

12. The lawnmower deck according to claim 3, wherein the deck further comprises a channel and the stiffener is received in the channel.

13. A lawnmower deck comprising:

a plastic deck component having:

an engine bed;

5 a skirt centered about the engine deck and extending outwardly and downwardly to encircle the engine bed, the skirt defining:

a cutting chamber below the engine bed; and

a plurality of wheel mounts; and
means for resisting flexion of the plastic deck component.

14. The lawnmower deck according to claim 13, wherein the means for resisting flexion of the plastic deck includes a stiffener connected to the plastic deck.

15. The lawnmower deck according to claim 14, wherein the means for resisting flexion of the plastic deck further includes a cover extending over the stiffener and connected to the plastic deck.

16. The lawnmower deck according to claim 14, wherein the means for resisting flexion of the plastic deck further includes a pair of handle mounts connected to the stiffener.

17. The lawnmower deck according to claim 16, wherein the means for resisting flexion of the plastic deck further includes ribs on either side of the stiffener and between a pair of the plurality of wheel mounts.

18. A walk-behind lawnmower comprising:

a deck having:

an engine bed;

a skirt centered on the engine bed and extending outwardly and downwardly from the engine bed and encircling the engine bed, the skirt defining:

a cutting chamber below the engine bed;

a discharge chute in communication with the cutting chamber;

two laterally spaced front wheel mounts at the front of the deck;

two laterally spaced rear wheel mounts at the rear of the deck; and

a channel extending between each of the wheel mounts and along the

discharge chute;

a stiffener received in the channel;

a cover extending over the stiffener;

a prime mover mounted on the engine bed; and

a handle connected to the deck.

19. The walk-behind lawnmower according to claim 18, wherein the stiffener encircles the engine bed.
20. The walk-behind lawnmower according to claim 19, wherein the stiffener comprises:
two side stiffener sections; and
two transverse stiffener sections connected to the side stiffener sections.
21. The walk-behind lawnmower according to claim 20, wherein
the one of the transverse stiffener sections extends between the front wheel mounts;
the other of the transverse stiffener sections extends between the rear wheel mounts;
each of the side stiffener sections extends between a respective one of the front wheel mounts
5 and a respective one of the rear wheel mount.
22. The walk-behind lawnmower according to claim 21, wherein each of the side stiffener
sections comprises:
two inclined sections; and
a substantially horizontal section intermediate the inclined sections; and
5 the cover engages the substantially horizontal sections, one of the inclined sections and the
other transverse stiffener section; and
the cover is spaced from the other of the inclined sections and the one transverse stiffener
section.
23. The walk-behind lawnmower according to claim 22, wherein the skirt further defines a
vertical wall spaced from the discharge chute and extending upwardly relative to the engine bed;
the one inclined section on one of the side stiffener sections extends along the vertical wall;
and
5 the one of the inclined sections of the other of the side stiffener sections extends along the
discharge chute.
24. The walk-behind lawnmower according to claim 23, wherein the one transverse stiffener
section is connected to one end of each of the side stiffener sections; and

the other transverse stiffener section is connected to the other end of each of the side stiffener sections and extends from the vertical wall to the discharge chute.

25. The walk-behind lawnmower according to claim 24, wherein the one transverse stiffener section is connected to one end of each of the side stiffener sections; and

the other transverse stiffener section is connected to the side stiffener sections intermediate the one transverse stiffener section and the other end of each of the side stiffener sections.

26. The walk-behind lawnmower according to claim 25, wherein each of the wheel mounts comprises a pivot bearing adapted to pivotally support a height adjustment lever; and

the one transverse stiffener section is aligned with the pivot bearings of the front wheel mounts.

27. The walk-behind lawnmower according to claim 26, further comprises a pair of handle mounts, each handle mount is located above a respective one of the rear wheel mounts and is connected to the stiffener; and

the handle is connected to the handle mounts.

28. The walk-behind lawnmower according to claim 27, wherein the handle mounts are connected to the stiffener proximate the junction of the side stiffener sections and the other transverse stiffener section.

29. The walk-behind lawnmower according to claim 27, wherein the handle mounts are formed in the other ends of the side stiffener sections.

30. The walk-behind lawnmower according to claim 27, wherein the deck comprises plastic and the stiffener comprises metal.

31. The walk-behind lawnmower according to claim 27, wherein the skirt further defines ribs extending between the front wheel mounts on either side of the one transverse stiffener; and

the cover extends over the ribs.